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# AVIATION AND AIRCRAFT JOURNAL



British Rigid Dirigible R-80

VOLUME XI  
Number 9

## SPECIAL FEATURES

LOENING MODEL 23 FLYING BOAT  
"WHO'S WHO IN AMERICAN AERONAUTICS"  
FLIGHT THROUGH THE GRAND CANYON  
NAVAL BUREAU OF AERONAUTICS

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# AVIATION AND AIRCRAFT JOURNAL

VOL. XI, NO. 9

Member of the Audit Bureau of Circulations

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# AVIATION AND AIRCRAFT JOURNAL

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AUGUST 20, 1921

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## Safety in Aviation

ANYTHING that is practical can always be made safe by proper management and regulation. Aviation is no exception to this, but just as the careful automobile driver is outshadowed by the mistakes of others, so in aviation individual precautions are insignificant without a uniform and intelligent regulation of all air traffic.

Nearly every motorist has at some time or other felt the inconvenience and fatality of special local laws governing the use of automobiles, even though fully 90 per cent of all automobile traffic is local in character. Considering that the great bulk of commercial aviation must be for inter-city travel, uncoordinated local regulations for aircraft are sure apt to hinder rather than to help. The need for some measure of national control, therefore, is apparent and puts a big responsibility on the recently appointed "Aeronautics Safety Code Committee" sponsored by the U. S. Bureau of Standards and the Society of Automotive Engineers.

Although detailed legislation must of necessity be the result of study and care, it seems not too soon to express some of the general ideas that such regulation should follow.

Standards should be provided by which to judge the structural safety and soundness of a machine and, at the same time, not unduly retard research work and the development of improved types of machines.

Seriously any transport should be restricted sufficiently to guarantee safety but not so weak as to hinder the development and expansion.

Coordination with existing laws of other nations should be made as close as possible.

In everything that is done it should be realized that aviation is still in a stage of rapid development and consequently the greatest factor in its success will be the character and shrewdness of the men actively associated with it.

## THE Disappearance of the Aeronautical Engineer

BARELY three years ago, there had been a unanimous realization in this country that the fundamental problem in the design and production of airplanes is that of technical direction and that, in any country, an aircraft industry in war or in peace can grow up only around a well-trained, up-to-date, and enthusiastic aeronautical engineering profession. On the basis of that realization followed attempts to increase the corps of aeronautical engineers in the United States by special schools for their training and by encouraging all those who had any bent for aeronautics to take up such studies.

Today, however, the aeronautical engineering profession has again fallen off, so far as superficial indications go, to a few men connected with airplane companies and a very few others engaged in consulting work or in teaching. Of the men and hundreds of men trained during the war in one or

many more phases of the art, nearly all have drifted away and there appears to exist no means of keeping in touch with them or of calling into national service again with a maximum of efficiency and minimum of delay should the need arise. To take a single concrete illustration, about 80 Army and Navy officers were graduated on the completion of a thorough intensive course in aeronautical engineering principles, from a series of schools run at the Massachusetts Institute of Technology during the war. Of these passed men hardly a score now remain in the governmental service or in any connection with aeronautics. While it is not to be expected that the military service alone could support as large a body of engineers as in times of national emergency, it is at least evident that men with such training should be recruited and kept needed for special service as far as possible, and that they should be encouraged to keep up their aeronautical studies in some degree and to keep in touch with modern developments. Such papers on current developments as have been presented by Major Bass and others to the Society of Automotive Engineers and the American Society of Mechanical Engineers are an excellent step in this direction and no effort should be spared to see that all such material is kept before those whose war-time training will enable them at least to read it profitably and understandingly.

## Another Original American Design

IF any further proof were needed of the assertion that American aircraft designers, given a fighting chance—which mainly means outwitting government orders—can produce machines second to none both abroad and often at home, the new Loening airplane may be taken as an example.

How is a flying boat of original American design when performance equals or it does not exceed that of many a European land machine of the same carrying capacity. This is an achievement which should make Americans appreciate the position our engineers are holding in aeronautics.

## International Seaplane Records

IN connection with the altitude record which was established by the Loening Model 23 flying boat it will surprise most of our readers to learn that the International Aeronautical Federation does not recognize records made by seaplanes as distinct from land machines. The reason for this attitude is not very clear. Seaplanes, particularly flying boats, differ from land machines very considerably in structure as well as in performance, so that it seems rather unfair to include them in the general class of airplanes.

We understand that the delegates of the Aero Club of America intend to bring up this point at the next annual convention of the F.A.I.













### Opening of Air Service R. O. T. C. Camp

The first Air Service Reserve Officers Training Camp opened at Fort Field, Fort Hill, Oklahoma, on June 10, 1921, thereby marking development in the Air Service preparatory program. There are thirty-eight students at the camp, seven from the Massachusetts Institute of Technology, five from the Georgia School of Technology, two from the Texas Agricultural and Mechanical College, seven from the University of Illinois, and five from the University of Washington. Students who are enrolled in the Air Service R. O. T. C. course at national institutions, and who have completed two years of Air Service work are eligible for the camp if they are physically qualified to pass the medical examination to determine fitness for flight duty.

At this advanced camp the students are taught aerial observation, and receive theoretical and practical instruction on the ground and flying experience in Dill-40 planes as observers.

The course of instruction lasts six weeks, and includes visual reconnaissance, radio, aerial gunnery, photography, meteorology, trap shooting, infantry drill, and calisthenics.

The administrative personnel of the camp is composed of the officers attached to the six R. O. T. C. units who have been ordered to Fort Field for the temporary duty during the camp.

### A New French Contemporary

We are in receipt of the first issue of *L'Air Libre*, a new weekly aeronautical publication with office at 17 Boulevard des Capucines, Paris, France. Our latest contemporary is read in the form of a newspaper and deals with all phases of aviation, past, present, and attention to news. The office of *L'Air Libre* is George H. Howard.

AVIATION AND AERIAL JOURNAL extends to the new one from the best wishes of progress and prosperity.

### Manufacturers Aircraft Association Officers

J. K. Robinson, Jr., president of the Gallatin Aircraft Corporation, East Greenwich, R. I., was elected president of the Manufacturers Aircraft Association, Inc., at their annual meeting, July 28. G. M. Williams, general manager of the Dayton-Wright Company, Dayton, Ohio, was elected vice president, F. H. Russell, vice president of the Curtiss Aeroplane and Motor Corporation, Garden City, N. Y. secretary, and F. H. Bantolovich, president of the Wright Aeronautical Corporation, Paterson, N. J., treasurer. In addition to these, there were elected to the Board of Directors the following: A. H. Fitt, L. W. F. Engineering Co., College Point, N. Y.; I. M. Upson, Aeronautics Plans and Motor Co., Kew-Forest, N. J.; Glenn L. Martin, Glenn L. Martin Co., Cleveland, O.; F. A. Moss, Thomas-Morse Aircraft Corp., New York, N. Y.; and Col. J. O. Vincent, Packard Motor Car Co., Detroit, Mich. S. S. Reddy was re-elected general manager and assistant treasurer.

### Reserve Unit

Enough men have been signed up in the Air Service Reserve Unit, now organized on the east bay district, to form an airplane squadron, photographic section and balloon company, it is announced. These squads before the unit are finally set up will be given an earlier consideration, and all desiring to be included in the unit have been urged to send in their names at once. Lieutenant Harvey M. Pugh, A.S.A., O.R.C., has been appointed officer, and Lieutenant James Carvigan, A.S.A., O.R.C., is personnel officer.

Special interest has been shown by selected men because of the prominence that members of the squadron will have the status of Cadets, with a corresponding opportunity to qualify as pilots and airplane observers. While no definite announcement has been made, it is believed that cadets in the balloon company will have similar status, qualifying them for practice with observation balloons and by the Coast Defense of San Francisco.

Applications for membership in the unit are being handled by Lieutenant Pugh, care of the Western Technical School, Berkeley, and by Lieutenant Carvigan, 400 Lexington avenue, Oakland, Calif.

## New York Aviators Support LaGuardia

New York aviators who served during the War have organized a committee to further the interests of Mayor Fiorella LaGuardia, President of the Board of Aldermen, in the coming New York City mayoralty election. President LaGuardia resigned his seat in Congress during the War to service in the Army Air Service. He attained the rank of Major, and was several decorations for valor while fighting in France and Italy.

The committee recently met and presented to President LaGuardia at the City Hall a new model airplane, symbol of the new spirit of state, and the first message from the Air Service to the people of New York.

The committee is headed by Jacques M. Swash, who was chief of gallery at Metz and Tannenberg, and is endowed with the destruction of 20 German machines for which he received the Distinguished Service Cross. In presenting this model airplane to President LaGuardia Mr. Swash said:

"Mayor, it is my pleasant duty to speak for this committee representing aviators who served with you, our countrymen of New York City. It was indeed gratifying when a few of us got together, that we found every man in our branch of the service standing solidly behind you, regardless of their political affiliations. No greater compliment can be paid to a soldier, than that of his comrades who served with him, shaking with of him after the trenches are laid over, and it is a rare event indeed, when a group of soldiers band themselves together and show the respect for a man that they do for you after having served side by side on an officer."

"We all know you. We all know what kind of an administration New York City should have. None of us know anything about politics. We do know that we want to see you continue, because from what we hear from non-political circles, you are the man who can best Tannenberg."

"We, who served with you, know how roughly you can attack, and we are sure that your machine is sound and your platform is just. We know that you will drive through the narrow roads with the same courage and accuracy that you dropped your high explosive bombs. You always keep your machine from scuttling or from swerving—that's the kind of men we want to guide the ship of this City. You are, Mayor, be present to you the symbol of the new spirit of state and with it the first message from the air service to the people of New York in the great battle now going on for the just, clean, efficient government."

The communication, which was presented at the same time, reads as follows:

### SPECIAL COMMUNIQUE TO ALL REPUBLICANS

1. That you will report at the Primary on Sept. 9 fully equipped to do your duty as Republicans of the City of New York.

2. That you will vote to give the City of New York a home rule administration through candidates who will be respon-

sible to the people who elect them and not to the moral house at Albany.

3. That you will remember the record of Mayor F. H. LaGuardia as a progressive Congressman; an aviator in the trenches of the army, acquiring qualities of independence, endurance and winning personality; as Tannenberg at the head of Aldermen who has stood first, last, and all the time for the welfare of the people of our city, and give him your vote for Mayor.

By command of Public Opinion.

THE AVIATION COMMITTEE FOR LA GUARDIA



JACQUES SWASH PRESENTING A MODEL, PRESENT AIRPLANE TO F. H. LA GUARDIA

Among the New York aviators who are on the committee are the following:

J. Swash, Harry Brown, Victor A. Clemens, Irving Morris, Henry M. Lathfield, Noel Armstrong, J. W. Morin, Eugene W. Gilman, E. Moody, Walter Lewis, R. B. Hershey, Paul Brown, Hugh D. McKay, Maper D. O. Schaeffer, Frederick J. Meyer, George A. Fagella.

Mr. D. Frank Morris, Wm. A. Fox, Herbert Schiff, Schuyler E. Van R. H. Hollender, Edward P. Frank, Vincent J. Colitti, William D. James, Herbert C. Comstock, Jr., Arthur P. Wasmata, Robert B. Rosner, Mr. Meredith J. Roberts, Geo. M. Moss, Harold A. Dunn, H. P. Ross, Jan Harold Patzer, Mr. Milton D. Lermanstein.

Albert W. Franklin, John E. McLaughlin, David E. Hennes, George Schelling, Donald E. Rossmore, Carl Weinstein, Walter E. Bushida, J. C. Barrows, L. D. Gardner, G. Newbold, M. Cherry, Augustus Post.



J. K. ROBINSON, JR., PRESIDENT OF MANUFACTURERS' ASSOCIATION, A.S.A., INC.

### Pertho Flood Photographs

The Colorado Flood and Iron Co. has engaged the Western Aerial Co. to take aerial photographs of the irrigation projects and reservoirs, damaged, and those belonging to the former company, in and around Pertho. E. B. Brown, pilot, E. Johnson, agent of the aircraft company, and A. North, photographer, are doing the work. Following the photography Mr. Brown will remain at Pertho and carry passengers over the devastated areas of the city.



G. M. WILLIAMS, VICE-PRES. OF MANUFACTURERS' ASSOCIATION, A.S.A., INC.

### Secretary of War and General Pershing Visit Langley Field

Secretary of War John W. Weeks, and General Pershing, Chief of Staff, recently made the first general inspection of Langley Field since taking up their duties in the War Department.

After making an inspection of the field, which included machines, their crews and equipment, the party was given an exhibition of the machines in flight; pursuit, observation and combat formations being flown. A special demonstration of the efficiency of the new F. M. Scout was given by Lieut. Carl Cover, Engineer Office of Langley Field.

### Air Seasoning Wood

In view of the use of wood in the aircraft industry it is interesting to learn that in cooperation with the sawmills and wood seasoning plants throughout the country, the Forest Products Laboratory, Madison, Wisconsin, is sponsoring an extensive field study on the air seasoning of wood. This study, it is believed, will be of extreme interest to the lumber seasoner and to the wood-using industries. The purpose is to determine the piling practices which will result in the fastest drying rates consistent with the least depreciation of stock, the least amount of required yard space, and the least handling costs. The study will be carried on concurrently on both hardwood and softwoods. All the superior seasoned woods of the United States will eventually receive consideration.

The air seasoning of wood is an old practice. No systematic attempt has ever been made, however, to work out the most conditions under which drying time and drying costs can be reduced to a minimum. It is not actually known which of the



PATENTED SYSTEM MODEL CY BUILDING IS IN USE UNDER AVIATION

superior methods of piling will give the quickest and the cheapest results under given climatic conditions. The new project will furnish a comparison of the effects of such piling variables as stack height, the openings of boards in layers, the height of pile foundations, and the direction of piling with relation to prevailing winds and yard airflows.

The study is expected to decide whether from a business standpoint lumber should be dried partly at the mill and partly at the point of utilization, or whether it should be completely dried at the mill. The data collected will also aid in showing whether air seasoning or kiln drying is the more profitable.

### New Air Transport Company

The Eastern Airlines, Inc., has been incorporated in Maryland. The headquarters of the company will be in Baltimore from which they intend to schedule passenger carrying, aerial survey and photography.

The president and manager of the concern is Erving Foster, and the secretary and treasurer is Robert Strong. Other incorporators include C. E. Bernhardt, E. McNeil Shumaker, George Giv, and Elliott Wheeler.

### Air Service Designations

Following the revision of Army Regulations an order issued by the Secretary of War and signed by General Pershing, Chief of Staff, states that the designation "company", as used in regulations applying to troops of Cavalry and batteries of Field Artillery, applies also to squadrons, air parks, reconnaissance sections and photo sections of the Air Service. The designation "regiment", as used in the regulations, applies also to groups of the Air Service.

### Forest Fire Patrols

Secretary of War Weeks has announced that the use of Army surplus for fire patrol in western States will be discontinued next summer because of the large reduction now being made in appropriations for military expenditures for only the most necessary military needs.

## Where to Fly

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HD-4B	3500	8.00 m 2600 ft	120 mph 190 km	18 men 720 H.P.	18.4	0.5	10 min.	15 min.

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As a non-partisan and constructive force for the national good, its influence is being extended to every state, every county, and every local community, and reorganization makes membership possible to all those everywhere, who are interested in aviation.

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